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ABSTRACT

The objective of this study was to determine the effects of examiner variables such as language, ethnicity, and sex in the measurement of the self-concept of Spanish-speaking migrant pupils. The sample consisted of 169 Spanish-speaking migrant pupils, aged 10 to 12, in a Migratory Children's 1971 Summer Program. These subjects came from 5 Connecticut centers and 1 New York center. The subjects at each center were divided into 4 groups. In each center, a different pair of Puerto Rican and Anglo examiners of the same sex administered the Coopersmith Self-Esteem Inventory using an audio-visual presentation procedure consisting of overhead transparencies and corresponding audio tapes in separate Spanish and English versions. Each examiner tested one group in Spanish and one in English. The Oral Vocabulary subtest of the Inter-American Test of General Ability, Level II in both Spanish and English forms, was used as a language screening device so that only the subjects who had a sufficient level of comprehension in the language in which they were tested would be included in the analysis of examiner effects. The results indicated the importance of the cultural-linguistic factors; consequently, it was suggested that care should be taken to provide contextual consonance and that caution must be exercised when using the commonly available self-report instruments to insure that the language difficulty level is commensurate with the proficiency level of the pupils. (Author/NQ)

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The Influence of Language and Ethnicity on the Measurement of Self-Concept of Spanish-Speaking Migrant Pupils

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ABSTRACT

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Native language and culture of Spanish-speaking migrant children are important factors in the measurement of their self-concept. Several studies have indirectly indicated the importance of such factors in test performance. The objective of this study, therefore, was to determine the effects of such examiner variables as language, ethnicity, and sex. The experimental results indicate importance of the cultural-linguistic factors; consequently, care should be taken to provide contextual consonance. Moreover, caution must be exercised when using the commonly available self-report instruments to insure that the language difficulty level is commensurate with the proficiency level of the pupils.

There is evidence that the native language and culture of Spanish-speaking migrant children may be important factors in the measurement of their self-concept. Several studies have indirectly indicated the importance of language and cultural factors in the test performance of such children. Anastasi and Cordova (1953), for example, pointed out the possible effect of the language and sex of the examiner in the I.Q. test performance of Puerto Rican pupils. Harrison (1967) found evidence of such intervening examiner variables in the language testing of other culturally different pupils. However, the effect of such factors is not necessarily limited to intelligence and language testing. Jacobs and Pierce (1966) noted the importance of examiner ethnicity in the testing of Spanish-speaking students with respect to creativity and racial attitudes, respectively.

OBJECTIVE OF THE INQUIRY

Migrant education programs seem to be particularly lacking in attention to the native language and culture of Spanish-speaking migrant children for the purposes of self-concept enhancement and measurement. The objective of this study, therefore, was to determine the effects of such examiner variables as language, ethnicity, and sex in the measurement of the self-concept of Spanish-speaking migrant pupils.

DATA SOURCE

The sample consisted of 169 Spanish-speaking migrant pupils, aged ten to twelve, in a Migratory Children's 1971 Summer Program. These subjects came from five Connecticut centers and one New York center.

METHOD

Instruments

The Coopersmith Self-Esteem Inventory (CSEI) was used as a measure of self-concept. The CSEI consists of 42 statements to which the subject responds either "Like me" or "Unlike me." Coopersmith (1967) found a test-retest reliability of .88 over a five-week interval with a sample of 30 fifth-graders.

The subjects were also administered the Oral Vocabulary (OV) subtest of the Inter-American Test of General Ability, Level II, in alternate Spanish and English forms, as a screening device of language proficiency. This measure consists of 30 multiple-choice pictorial items which the student marks in accordance with orally presented vocabulary stimuli.

Procedure

The CSEI was administered using an audio-visual presentation procedure, consisting of overhead transparencies and corresponding audio tapes in separate Spanish and English versions. The Spanish version of the CSEI was prepared by a committee of Spanish-speaking educators and parents. The subjects at each center were randomly divided into four groups. In each center, a different pair of Puerto Rican and Anglo examiners of the same sex administered the CSEI. Each examiner tested one group in Spanish and one group in English.

The OV was used as a language screening device so that only the pupils who had a sufficient level of comprehension in the language in which they were tested would be included in the analysis of examiner effects. The difficulty level of the vocabulary of the Spanish and English versions of the CSEI and OV was determined by Eaton's (1940) frequency list. The minimum OV scores established thereby for adequate comprehension of the English and Spanish versions of the CSEI were 15 and 22, respectively. As a result, the total sample of 169 was reduced to an n of 58 after screening for purposes of the analysis of language-examiner effects. Personal data, including the grade level, sex, age, and number of years on the mainland, was collected for each child.

Statistical Analysis

Several statistical analyses were performed. Initially, descriptive statistics were generated to define the sample before and after language screening. The relationships between self-concept and the other variables were assessed by correlation analyses. A 2 x 2 ANOVA design was employed to ascertain the effect of the language and examiner variables on the measurement of self-concept. A second 2 x 2 ANOVA procedure was utilized to test the effect of the examiner's sex on the self-concept of boys and girls.

RESULTS

The descriptive statistics for the total sample (n=169) and the linguistically screened subsample (n=58) are presented in Table I.

Table I

Descriptive Statistics of Sample B
Before and After Language Screening

	Before Language Screening (n = 169)		After Language Screening (n = 58)		
	Mean	s.d.	Mean	s.d.	r with CSEI
Grade	6.05	1.00	6.20	.96	.28*
Age	11.32	1.20	11.51	1.22	.30*
Yrs. on Mainland	5.67	3.49	5.42	3.62	.07
English Vocab.	16.24	4.78	17.93	5.01	.21
Spanish Vocab.	19.10	4.29	21.22	4.85	.22

* $p < .05$

Few differences exist between the two sets of results, excpt as expected in the vocabulary subtest scores. Age and grade correlated significantly with self-concept for the screened subsample.

The means and ANOVA results for the examiner and language variables are given in Table 2.

Table 2

Means and ANOVA of Self-Concept Scores (CSEI)
Re Examiner and Language Variables

MEANS

Examiner	Language: Spanish	Language: English
Puerto Rican	24.50 n=14	24.54 n=13
Anglo	26.40 n=10	24.29 n=21

ANOVA

Source	df	MS	F
Examiner	1	2.91	.12
Language	1	11.63	.47
Interaction	1	18.66	.76
Error	54	24.54	
TOTAL	57		

Although the children tested in Spanish by an Anglo examiner scored approximately two points higher than the other three groups, the analysis of variance indicates that this difference was not significant.

Table 3 contains the means and analysis of variance results for the sample partitioned according to the sex of the examiner and the sex of the child.

Table 3

Means and ANOVA of Self-Concept Scores (CSEI)
Re Sex of Examiner and Child

MEANS

	Child	
Examiner	Male	Female
Male	25.36 n=14	23.07 n=14
Female	24.65 n-17	26.08 n-13

ANOVA

Source	df	MS	F
Examiner	1	16.04	.67
Child	1	2.91	.12
Interaction	1	48.72	2.04
Error	54	23.91	
TOTAL	57		

Once again, significant differences were not attained. It should be noted, however, that the children tended to score higher when the sex of the child matched the sex of the examiner and that this effect was more pronounced for girls than boys. In fact, a one-tailed t test indicates that the girls scored significantly higher when tested by a female as opposed to a male at the .10 level ($t = 1.58$).

DISCUSSION

The relatively low number of subjects surpassing the minimum scores of listening comprehension on the OV found to be commensurate with the difficulty level of the CSEI in each language should be seriously noted. The CSEI and other verbal self-report instruments are often administered so that pupils are left to read and respond to them in typical paper-and-pencil test fashion. The intervening problem of literacy in English thus becomes especially acute for Spanish-speaking migrant children. However, even the special provisions of translating the directions and items and presenting them in either language audio-visually may not be sufficient, given the lack of educational opportunities of such children and the presence of intervening linguistic factors in such tests. Assuming that the 169 children tested in the seven centers in Connecticut and New York are not atypical of Spanish-speaking migrant children in the intermediate grades, a majority did not seem to have developed the proficiency to clearly comprehend the CSEI in either language.

The self-concept scores of the pupils in the screened subsample correlated significantly with their age and grade. Such a relationship may be indicative of the possible enhancement effects of maturation or education. However, any clear-cut conclusion awaits further research covering and differentiating a wider range of these and related factors.

On the other hand, self-concept did not appear to be significantly related to aural ability in either language or to the number of years on the mainland. However, research utilizing

instruments focusing on the school-related and ethnic-identified aspects of self-concept may reveal such relationships.

Neither the language of the instrument nor the ethnicity and sex of the examiner appeared to significantly affect the measurement of the self-concept of Spanish-speaking pupils with the CSEI. However, the artificial separation of the language and ethnicity factors via audio tapes may have obscured any real effect. That language and culture are intimately interdependent is the basis for bilingual/bicultural approaches to education. The role of the examiner's cultural and linguistic identification vis-à-vis Spanish-speaking students may have been further minimized by the group-testing situation. Further research along these lines in the more intense context of individual face-to-face testing situations may reveal the effects of such factors.

The higher CSEI scores attained by children tested in Spanish by an Anglo examiner poses as an interesting condition. A feasible explanation is that the children tested under these circumstances may have positively viewed the situation, perceiving the Anglo examiners as having recognized their native language and, consequently, as being willing to test them using Spanish. Of course, this statement is tentative in view of the fact that significance was not attained. Further research in the area is recommended. As children, especially girls, tended to obtain higher self-concept scores when tested by an examiner of the same sex, further study in this area is also needed.

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